DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015506 Address: 333 Burma Road **Date Inspected:** 08-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Weld Procedures Followed: Yes N/A N/A **Electrode to specification:** No Yes No Yes N/A N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 9BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD27-PP75-029, Partial Height Diaphragm web splice. The welder is identified as #048659 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-B-U2a-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as SSD27-PP75-035, 036, Partial Height Diaphragm to FL3 Stiffener. The welder is identified as #222396 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Xu Jin Long. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared

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to comply with the Applicable WPS.

Segment 9BE/9CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate transverse segment splice, bike path side.

Segment 9DE

This QA Inspector observed beveling of the Bottom Plate and Deck Plate with the use of a mechanical guided torch.

Segment 9BE

This QA Inspector observed fit up of the Longitudinal Diaphragm at panel point 76 east, cross beam side.

Segment 9BW

This QA Inspector observed installation of Bottom Panel to FL3 at panel points 74-76 after blast and coating of panel.

Segment 9AW/9BW

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Bottom Plate and Side Plate WT stiffener hold back fillets welds.

QA Verification

BAY 11 - Bolt Testing Room

This QA Inspector observed ZPMC personnel performing Rotational Capacity testing and Pre-installation verification of required torque for A325 High Strength Bolt assemblies with a Skidmore-Wilhelm Model: MS, serial number: 15866 (calibration expiration date 4/29/11) and torque wrench identified as #2 (calibration expiration date 10/12/10) on the following bolts:

M16x70 lot number DHGM160044

Ten (10) bolt assemblies were tested, five (5) by turning of the nut and five (5) by turning of the bolt head.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Dan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer